SOFTWARE COMMUNICATIONS ARCHITECTURE SPECIFICATION

SCA 4.0 ERRATA

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Version: 1.0

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REVISION SUMMARY

Version	Revision
1.0	Initial Release

TABLE OF CONTENTS

1. OVERVIEW

This errata sheet contains a number of modifications applied against the content of the following specifications:

- SCA 4.0 published 28 February 2012

Each section of this document identifies a change and designates a target section or attachment of the SCA 4.0 specification.

1.1 SECTION 3.1.3.3.1.3.4.2 SOFTWAREPROFILE

Page 66 – (remove duplicate wording)

From: SCA67 The readonly softwareProfile attribute shall return the the filename of the SAD or the SAD itself that is used to create the ApplicationFactoryComponent.

To: SCA67 The readonly softwareProfile attribute shall return the filename of the SAD or the SAD itself that is used to create the ApplicationFactoryComponent.

1.2 SECTION 3.1.3.3.2.1.4 CONSTRAINTS

Page 85 – (correct missing section number)

From:

ApplicationManagerComponent

To:

3.1.3.3.2.2 ApplicationManagerComponent

(Note: Results in subsection renumbering from 3.1.3.3.2.1.5 - 3.1.3.3.2.1.8 to 3.1.3.3.2.2.1 - 3.1.3.3.2.2.4)

1.3 SECTION 3.1.3.3.2.3.3 SEMANTICS

Page 92 – (clarify log construct)

From: A DomainManagerComponent shall write an ADMINISTRATIVE_EVENT log to a DomainManagerComponent's log, when the managers attribute is obtained by a client.

To: A DomainManagerComponent shall write an ADMINISTRATIVE_EVENT log record to a DomainManagerComponent's log, when the managers attribute is obtained by a client.

Page 92 – (remove duplicate wording)

From: The *registerComponent* operation shall write a FAILURE_ALARM log record to a DomainManagerComponent log record to a DomainManagerComponent log upon unsuccessful component registration.

To: The *registerComponent* operation shall write a FAILURE_ALARM log record to a DomainManagerComponent log upon unsuccessful component registration.

1.4 SECTION 3.1.3.4.1.9.5.1.3 BEHAVIOR

Page 116 – (remove unnecessary carriage return and correct spelling)

From: SCA293

The *addDevice* operation shall add the input associatedDevice parameter to the AggregateDevice's devices attribute when the associatedDevice associated with the input identifier paramter does not exist in the devices attribute.

To: The *addDevice* operation shall add the input associatedDevice parameter to the AggregateDevice's devices attribute when the associatedDevice associated with the input identifier parameter does not exist in the devices attribute.

1.5 SECTION 3.1.3.4.2.1.3 SEMANTICS

Page 117 – (change text at beginning of sentence to unhidden font)

From: ComponentBaseDevice shall register with its launching DeviceManagerComponent via the *ComponentRegistry::registerComponent* operation.

To: A ComponentBaseDevice shall register with its launching DeviceManagerComponent via the *ComponentRegistry::registerComponent* operation.

Page 117 – (correct section number reference)

From: A child ComponentBaseDevice shall add itself to a parent device using the executable Composite Device IOR and DEVICE_ID parameters per 3.1.3.3.2.4.3.

To: A child ComponentBaseDevice shall add itself to a parent device using the executable Composite Device IOR and DEVICE_ID parameters per 3.1.3.3.2.5.3.

Page 117 – (correct section number reference)

From: The values associated with the parameters (PROFILE_NAME, COMPOSITE_DEVICE_IOR, and DEVICE_ID) as described in 3.1.3.3.2.4.3 shall be used to set the ComponentBaseDevice's softwareProfile, compositeDevice, and identifier attributes, respectively.

To: The values associated with the parameters (PROFILE_NAME, COMPOSITE_DEVICE_IOR, and DEVICE_ID) as described in 3.1.3.3.2.5.3 shall be used to set the ComponentBaseDevice's softwareProfile, compositeDevice, and identifier attributes, respectively.

1.6 SECTION 3.1.3.5.2.6.3 SEMANTICS

Page 141 – (correct section number reference)

From: The values associated with the parameters (SERVICE_NAME) as described in 3.1.3.3.2.4.3 shall be used to set the platform service's ComponentIdentifier interface identifier attribute.

To: The values associated with the parameters (SERVICE_NAME) as described in 3.1.3.3.2.5.3 shall be used to set the platform service's ComponentIdentifier interface identifier attribute.

1.7 SECTION B.5 INFORMATIVE REFERENCES

Page 8 – (remove unused reference citation)

From: [5] Common Object Request Broker Architecture (CORBA) Specification, Version 3.2 Part 3: CORBA Component Model, version 3.2 formal/2011-11-03, November 2011.

To: (deleted text)

1.8 SECTION C.7.3.1 CFAGGREGATEDEVICE IDL

Page 22 – (remove unnecessary forward declaration of interface - `CFAggregateDevice.idl`)

From:

```
module CF {
   interface Device;
```

To:

```
module CF {
```

1.9 SECTION D-1.8 PROPERTIES DESCRIPTOR

Page 26 – (clarify PRF terminology)

From: SCA494 A Properties File shall have a ".prf.xml" extension.

To: A Properties Descriptor shall have a ".prf.xml" extension.

1.10 SECTION D-1.11.1.3 COMPONENTFILES

Page 11 – (clarify reference to SAD section)

From: See section D-1.10.1.2 for the definition of the *componentfiles* element.

To: The XML definition of the DCD's *componentfiles* element is the same as the one provided in the SAD's section D-1.10.1.2, see that section for the XML definition of the *componentfiles* element.

1.11 SECTION E-1.1 CONFORMANCE

Page 6 – (correct duplicate section numbers)

From: E-1.1 CONFORMANCE

To: E-1.2 CONFORMANCE

(Note: Results in remainder of subsections to be renumbered.)

1.12 SECTION E-1.5.1 OPERATING ENVIRONMENT

Page 6 – (correct section number reference)

From: SCA505 The OE shall provide the features designated as mandatory, as specified in E-1.6, for the SCA CORBA profile implemented.

To: SCA505 The OE shall provide the features designated as mandatory, as specified in E-1.7, for the SCA CORBA profile implemented.

1.13 SECTION E-1.5.2 APPLICATIONS

Page 7 – (correct section number reference)

From: SCA506 Applications shall be limited to using the features designated as mandatory, as specified in E-1.6, for the SCA CORBA profile implemented.

To: SCA506 Applications shall be limited to using the features designated as mandatory, as specified in E-1.7, for the SCA CORBA profile implemented.

1.14 SECTION E-1.6.1.1 COMPLEX TYPES IN ANY

Page 7 – (remove commentary text, information available in SCA User's Guide)

From: Changing this would have a significant impact on porting existing code to SCA Next.

To: (deleted text)

1.15 SECTION F.8 ATTACHMENTS

Page 12 – (correct reference to mapping)

From: This attachment includes all the SCA requirements mapped to UOFs and profile(s).

To: This attachment includes all the SCA requirements mapped to UOFs and component(s).

1.16 APPENDIX F - ATTACHMENT 1: SCA CONFORMANCE MAPPING

Page 4 – (remove non-requirement sentence)

From: SCA168 Each executable ApplicationResourceComponent shall set its identifier attribute using the Component Identifier execute parameter.Each executable ApplicationResourceComponent shall accept executable parameters as specified in section 3.1.3.4.1.8.5.1.3

To: SCA168 Each executable ApplicationResourceComponent shall set its identifier attribute using the Component Identifier execute parameter.

Page 6 – (correct spelling of "Application Unit(s) of Functionality" for SCA151, SCA152, SCA153, and SCA437)

From: Management Releaseable

To: Management Releasable

Page 11 to 17 – (correct "Document Section" for SCA158, SCA159, SCA160, SCA161, SCA162, SCA163, SCA543, SCA164, SCA165, SCA525, SCA174, SCA177, SCA178, SCA179, SCA180, SCA181, SCA182, SCA184, SCA185, SCA186, SCA187, SCA189, SCA191, SCA193, SCA194, SCA195, SCA196, SCA197, SCA198, SCA199, SCA201, SCA202, SCA203, SCA204, SCA205, SCA206, SCA207, SCA208, SCA209, SCA210,

SCA211, SCA212, SCA213, SCA214, SCA532, SCA215, SCA216, SCA217, SCA218, SCA219, SCA221, SCA224, SCA226, SCA227, SCA228, SCA229, SCA230, SCA231, SCA232, SCA233, SCA438, SCA439, SCA442, SCA449, SCA450, SCA538, SCA234, SCA235, SCA236, SCA505, SCA506, SCA507, SCA508, and SCA509)

From: (see document)

To: (see document)

Page 7 – (remove duplicate wording)

From: SCA67 The readonly softwareProfile attribute shall return the the filename of the SAD or the SAD itself that is used to create the ApplicationFactoryComponent.

To: SCA67 The readonly softwareProfile attribute shall return the filename of the SAD or the SAD itself that is used to create the ApplicationFactoryComponent.

Page 12 – (clarify log construct)

From: SCA179 A DomainManagerComponent shall write an ADMINISTRATIVE_EVENT log to a DomainManagerComponent's log, when the managers attribute is obtained by a client.

To: SCA179 A DomainManagerComponent shall write an ADMINISTRATIVE_EVENT log record to a DomainManagerComponent's log, when the managers attribute is obtained by a client.

Page 12 – (remove duplicate wording)

From: SCA191 The registerComponent operation shall write a FAILURE_ALARM log record to a DomainManagerComponent log record to a DomainManagerComponent log upon unsuccessful component registration.

To: SCA191 The registerComponent operation shall write a FAILURE_ALARM log record to a DomainManagerComponent log upon unsuccessful component registration.

Page 15 – (add missing bullet numbers)

From: SCA438 When a ComponentBaseDevice is created via PlatformComponentFactoryComponent, the DeviceManagerComponent shall supply the following properties as the qualifiers parameter to the referenced ComponentFactory::createComponent operation:Profile Name - The ID is "PROFILE_NAME" and the value is a string that is the full mounted file system file path name; Device Identifier - The ID is "DEVICE_ID" and the value is a string that corresponds to the DCD componentinstantiation id attribute;Composite Device IOR - The ID is "Composite_DEVICE_IOR" and the value is a string that is an AggregateDeviceComponent stringified IOR (this parameter is only used when the DCD componentinstantiation element represents the child device of another componentinstantiation element);The componentinstantiation componentfactoryref element properties whose kindtype element is factoryparam.

To: SCA438 When a ComponentBaseDevice is created via PlatformComponentFactoryComponent, the DeviceManagerComponent shall supply the

following properties as the qualifiers parameter to the referenced ComponentFactory::createComponent operation:1.Profile Name - The ID is "PROFILE_NAME" and the value is a string that is the full mounted file system file path name;2.Device Identifier - The ID is "DEVICE_ID" and the value is a string that corresponds to the DCD componentinstantiation id attribute;3.Composite Device IOR - The ID is "Composite_DEVICE_IOR" and the value is a string that is an AggregateDeviceComponent stringified IOR (this parameter is only used when the DCD componentinstantiation element represents the child device of another componentinstantiation element);4.The componentinstantiation componentfactoryref element properties whose kindtype element is factoryparam.

Page 15 – (add missing bullet numbers)

From: SCA439 When a ServiceComponent is created via a PlatformComponentFactoryComponent, the DeviceManagerComponent shall supply the following properties as the qualifiers parameter to the referenced PlatformComponentFactoryComponent's createComponent operation: Service Name when the DCD componentinstantiation usagename element is non-null value - The ID is "SERVICE_NAME" and the value is a string in an "identifier\type" format that corresponds to the DCD componentinstantiation usagename element;The componentinstantiation componentfactoryref element properties whose kindtype element is factoryparam.

To: SCA439 When a ServiceComponent is created via a PlatformComponentFactoryComponent, the DeviceManagerComponent shall supply the following properties as the qualifiers parameter to the referenced PlatformComponentFactoryComponent's createComponent operation: 1.Service Name when the DCD componentinstantiation usagename element is non-null value - The ID is "SERVICE_NAME" and the value is a string in an "identifier\type" format that corresponds to the DCD componentinstantiation usagename element;2.The componentinstantiation componentfactoryref element properties whose kindtype element is factoryparam.

Page 16 – (add missing bullet numbers)

From: SCA442 When a ComponentBaseDevice is launched directly (e.g. thread, posix_spawn) or by using an ExecutableDeviceComponent, the DeviceManagerComponent shall supply execute operation parameters for a device consisting of:Component Registry IOR when the DCD componentinstantiation stringifiedobjectref element is null value - The ID is "COMPONENT_REGISTRY_IOR" and the value is a string that is the ComponentRegistry stringified IOR;Profile Name - The ID is "PROFILE_NAME" and the value is a string that is the full mounted file system file path name;Device Identifier - The ID is "DEVICE_ID" and the value is a string that corresponds to the DCD componentinstantiation id attribute;Composite Device IOR - The ID is "Composite_DEVICE_IOR" and the value is a string that is an AggregateDeviceComponent stringified IOR (this parameter is only used when the DCD componentinstantiation element represents the child device of another componentinstantiation element);The execute ("execparam") properties as specified in the DCD for a componentinstantiation element (a DeviceManagerComponent passes execparam parameters' IDs and values as string values).

To: SCA442 When a ComponentBaseDevice is launched directly (e.g. thread, posix_spawn) or by using an ExecutableDeviceComponent, the DeviceManagerComponent shall supply execute operation parameters for a device consisting of:1.Component Registry IOR when the DCD componentinstantiation stringifiedobjectref element is null value - The ID is "COMPONENT_REGISTRY_IOR" and the value is a string that is the ComponentRegistry stringified IOR;2.Profile Name - The ID is "PROFILE_NAME" and the value is a string that is the full mounted file system file path name;3.Device Identifier - The ID is "DEVICE_ID" and the value is a string that corresponds to the DCD componentinstantiation id attribute;4.Composite Device IOR - The ID is "Composite_DEVICE_IOR" and the value is a string that is an AggregateDeviceComponent stringified IOR (this parameter is only used when the DCD componentinstantiation element represents the child device of another componentinstantiation element);5.The execute ("execparam") properties as specified in the DCD for a componentinstantiation element (a DeviceManagerComponent passes execparam parameters' IDs and values as string values).

Page 16 – (add missing bullet numbers)

From: SCA449 If a PlatformComponentFactoryComponent is deployed by the DeviceManagerComponent, a DeviceManagerComponent shall supply execute operation parameters consisting of:Component Registry IOR - The ID is "COMPONENT_REGISTRY_IOR" and the value is a string that is the ComponentRegistry stringified IOR when the DCD componentinstantiation stringifiedobjectref element is null value;Component Identifier - The ID is "COMPONENT_IDENTIFIER" and the value is a string that corresponds to the DCD componentinstantiation id attribute;The execute ("execparam") properties as specified in the DCD for a componentinstantiation element (a DeviceManagerComponent passes execparam parameters' IDs and values as string values).

To: SCA449 If a PlatformComponentFactoryComponent is deployed by the DeviceManagerComponent, a DeviceManagerComponent shall supply execute operation parameters consisting of:1.Component Registry IOR - The ID is "COMPONENT_REGISTRY_IOR" and the value is a string that is the ComponentRegistry stringified IOR when the DCD componentinstantiation stringifiedobjectref element is null value;2.Component Identifier - The ID is "COMPONENT_IDENTIFIER" and the value is a string that corresponds to the DCD componentinstantiation id attribute;3.The execute ("execparam") properties as specified in the DCD for a componentinstantiation element (a DeviceManagerComponent passes execparam parameters' IDs and values as string values).

Page 16 – (add missing bullet numbers)

From: SCA450 A DeviceManagerComponent shall use the information in its DCD for determining:Services to be deployed for this DeviceManagerComponent (for example, log(s)),ComponentBaseDevices to be created for this device manager (when the DCD deployondevice element is not specified then the DCD componentinstantiation element is deployed on the same hardware device as the device manager), ComponentBaseDevices to be deployed on (executing on) another ComponentBaseDevice,ComponentBaseDevices to be aggregated to another ComponentBaseDevice,Mount point names for file systems,The DeviceManagerComponent's identifier attribute value which is the DCD's id attribute value, andDomainManagerComponent's ManagerRegistry and ComponentRegistry references

To: SCA450 A DeviceManagerComponent shall use the information in its DCD for determining:1.Services to be deployed for this DeviceManagerComponent (for example, log(s)),2.ComponentBaseDevices to be created for this device manager (when the DCD deployondevice element is not specified then the DCD componentinstantiation element is deployed on the same hardware device as the device manager), 3.ComponentBaseDevices to be deployed on (executing on) another ComponentBaseDevice,4.ComponentBaseDevices to be aggregated to another ComponentBaseDevice,5.Mount point names for file systems,6.The DeviceManagerComponent's identifier attribute value which is the DCD's id attribute value, and7.DomainManagerComponent's ManagerRegistry and ComponentRegistry references

Page 17 – (add missing bullet numbers)

From: SCA538 If a ServiceComponent is deployed by the DeviceManagerComponent, a DeviceManagerComponent shall supply execute operation parameters consisting of:Component Registry IOR - The ID is "COMPONENT_REGISTRY_IOR" and the value is a string that is the ComponentRegistry stringified IOR when the DCD componentinstantiation stringifiedobjectref element is null value;Service Name when the DCD componentinstantiation usagename element is non-null value - The ID is "SERVICE_NAME" and the value is a string in an "identifier\type" format that corresponds to the DCD componentinstantiation usagename element;The execute ("execparam") properties as specified in the DCD for a componentinstantiation element (a DeviceManagerComponent passes execparam parameters' IDs and values as string values).

To: SCA538 If a ServiceComponent is deployed by the DeviceManagerComponent, a DeviceManagerComponent shall supply execute operation parameters consisting of:1.Component Registry IOR - The ID is "COMPONENT_REGISTRY_IOR" and the value is a string that is the ComponentRegistry stringified IOR when the DCD componentinstantiation stringifiedobjectref element is null value;2.Service Name when the DCD componentinstantiation usagename element is non-null value - The ID is "SERVICE_NAME" and the value is a string in an "identifier\type" format that corresponds to the DCD componentinstantiation usagename element;3.The execute ("execparam") properties as specified in the DCD for a componentinstantiation element (a DeviceManagerComponent passes execparam parameters' IDs and values as string values).

Page 19 – (remove unnecessary carriage return and correct spelling)

From: SCA293

The addDevice operation shall add the input associatedDevice parameter to the AggregateDevice's devices attribute when the associatedDevice associated with the input identifier paramter does not exist in the devices attribute.

To: The addDevice operation shall add the input associatedDevice parameter to the AggregateDevice's devices attribute when the associatedDevice associated with the input identifier parameter does not exist in the devices attribute.

Page 19 – (add missing first word)

From: SCA298 ComponentBaseDevice shall register with its launching DeviceManagerComponent via the ComponentRegistry::registerComponent operation.

To: SCA298 A ComponentBaseDevice shall register with its launching DeviceManagerComponent via the ComponentRegistry::registerComponent operation.

Page 19 – (correct section number reference)

From: SCA299 The values associated with the parameters (PROFILE_NAME, COMPOSITE_DEVICE_IOR, and DEVICE_ID) as described in 3.1.3.3.2.4.3 shall be used to set the ComponentBaseDevice's softwareProfile, compositeDevice, and identifier attributes, respectively.

To: SCA299 The values associated with the parameters (PROFILE_NAME, COMPOSITE_DEVICE_IOR, and DEVICE_ID) as described in 3.1.3.3.2.5.3 shall be used to set the ComponentBaseDevice's softwareProfile, compositeDevice, and identifier attributes, respectively.

Page 19 – (correct section number reference)

From: SCA458 A child ComponentBaseDevice shall add itself to a parent device using the executable Composite Device IOR and DEVICE_ID parameters per 3.1.3.3.2.4.3.

To: SCA458 A child ComponentBaseDevice shall add itself to a parent device using the executable Composite Device IOR and DEVICE_ID parameters per 3.1.3.3.2.5.3.

Page 20 – (remove non-requirement sentences)

From: SCA249 The ComponentBaseDevice shall send a StateChangeEventType event to the Incoming Domain Management event channel, whenever the usageState attribute changes.For this event,The producerId field is the identifier attribute of the device.The sourceId field is the identifier attribute of the device.The stateChang

To: SCA249 The ComponentBaseDevice shall send a StateChangeEventType event to the Incoming Domain Management event channel, whenever the usageState attribute changes.

Page 24 – (add missing bullet numbers)

From: SCA440 The FileSystem::query operation shall recognize and provide the designated return values for the following fileSystemProperties (section 3.1.3.5.1.2.3.2):SIZE - an ID value of "SIZE" causes the query operation to return an unsigned long long containing the file system size (in octets);AVAILABLE_SPACE - an ID value of "AVAILABLE_SPACE" causes the query operation to return an unsigned long long containing the available space on the file system (in octets).

To: SCA440 The FileSystem::query operation shall recognize and provide the designated return values for the following fileSystemProperties (section 3.1.3.5.1.2.3.2):1.SIZE - an ID value of "SIZE" causes the query operation to return an unsigned long long containing the file system size (in octets);2.AVAILABLE_SPACE - an ID value of "AVAILABLE_SPACE" causes the query operation to return an unsigned long long containing the available space on the file system (in octets).

Page 24 – (add missing bullet numbers)

From: SCA441 "As a minimum, the query operation shall support the following input fileSystemProperties ID elements:

SIZE - a property item ID value of ""SIZE"" causes the query operation to return the combined total size of all the mounted file system as an unsigned long long property value.

AVAILABLE_SPACE - a property item ID value of ""AVAILABLE_SPACE"" causes the query operation to return the combined total available space (in octets) of all the mounted file system as unsigned long long property value."

To: SCA441 As a minimum, the query operation shall support the following input fileSystemProperties ID elements:1.SIZE - a property item ID value of "SIZE" causes the query operation to return the combined total size of all the mounted file system as an unsigned long long property value.2.AVAILABLE_SPACE - a property item ID value of "AVAILABLE_SPACE" causes the query operation to return the combined total available space (in octets) of all the mounted file system as unsigned long long property value.

Page 25 – (correct section number reference)

From: SCA317 The values associated with the parameters (SERVICE_NAME) as described in 3.1.3.3.2.4.3 shall be used to set the platform service's ComponentIdentifier interface identifier attribute.

To: SCA317 The values associated with the parameters (SERVICE_NAME) as described in 3.1.3.3.2.5.3 shall be used to set the platform service's ComponentIdentifier interface identifier attribute.

Page 27 – (clarify PRF terminology)

From: SCA494 A Properties File shall have a ".prf.xml" extension.

To: A Properties Descriptor shall have a ".prf.xml" extension.

Page 27 – (correct section number reference)

From: SCA505 The OE shall provide the features designated as mandatory, as specified in E-1.6, for the SCA CORBA profile implemented.

To: SCA505 The OE shall provide the features designated as mandatory, as specified in E-1.7, for the SCA CORBA profile implemented.

Page 27 – (correct section number reference)

From: SCA506 Applications shall be limited to using the features designated as mandatory, as specified in E-1.6, for the SCA CORBA profile implemented.

To: SCA506 Applications shall be limited to using the features designated as mandatory, as specified in E-1.7, for the SCA CORBA profile implemented.